2015 Cowboy Classic - Agricultural Technology and Mechanical Systems
Structural Systems-Welding Skill

Your summer job is working with your FFA advisor on his cow calf operation. This job has helped you improved your skills as a caregiver of the cattle as well as maintaining their nutrition. Your FFA advisor has decided to challenge your skills in welding. Your job at the end of summer is to increase the number of pens for the upcoming season of calves. Along with your FFA Advisor you have planned to add 6 more full sized pens to your feedlot just south of the existing pens. The FFA advisor has asked you to build the fence out of continuous fencing so that the fences are strong and hold up for a long time. Before starting this project your FFA advisor has asked you to practice on pieces in the shop similar to what you will be using to construct the pens with. Using the supplies provided of 1 ½ inch round pipe, weld a continuous pass to join the 2 pieces of metal. Do not adjust the polarity from its setting for this activity.

The welding rod chosen for this application is the Lincoln E7018 1/8” X 14” rod. List the ideal amperage range for this rod in each of these applications.

AC ____105-150_______Amps       DCEP ____100 - 140_______Amps

1. Match the correct answer choice to the welding symbols provided.

A. __3__  B. __2__  C. __4__  D. __5__  E. __1__

Welding Symbols Answer Choices

1. Single V butt / groove weld
2. Square butt groove weld
3. Single U butt groove weld
4. Single J butt groove weld
5. Single bevel butt weld with broad root face

2. What polarity type commonly used in welding practices is best reflected in the picture?

Answer: _____DC______________

3. Provide the correct answer from the choices provided. (Answers may be used more than once)

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<th>Criterion</th>
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